



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/652,585	08/31/2000	Salman Akram	97-1102.05	3980

James Duzan  
TRASKBRITT, PC  
PO Box 2550  
Salt Lake City, UT 84110

EXAMINER
----------

CHANG, RICK KILTAE

ART UNIT	PAPER NUMBER
----------	--------------

3729

DATE MAILED: 08/05/2003

23

Please find below and/or attached an Office communication concerning this application or proceeding.



EC

**Office Action Summary**

Application No.

09/652,585

Applicant(s)

AKRAM ET AL.

Examiner

Rick K. Chang

Art Unit

3729

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 May 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 52-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 52-54 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other: \_\_\_\_\_



*Specification*

1. The abstract of the disclosure is objected for the following reason: delete "In a socket . . . disclosed" (lines 1-2). Correction is required. See MPEP § 608.01(b).

*Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claim 52 is rejected under 35 U.S.C. 102(e) as being anticipated by Sinclair (US 5,984,694).

Sinclair discloses a semiconductive material contact body (14), a contact head (70), joined package (Fig. 10).

**NOTE: Please provide reference numerals to all the claimed limitations as well as support in the disclosure for better clarity. Applicants are duly reminded that a full and proper response to this Office Action that includes any amendment to the claims and specification of the application as originally filed requires that the applicant point out the**



Art Unit: 3729

**support for any amendment made to the disclosure, including the claims. See 37 CFR 1.111 and MPEP 2163.06.**

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 53-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sinclair (US 5,984,694) in view of Hirano et al (US 5,283,459), and further in view of Grabbe (US 5,173,055).

Sinclair fails to disclose stamping to form a contact head, etching silicon to form a contact body, and depositing a metal over a silicon surface.

Hirano discloses etching silicon to form a contact body (16 and 17) thereby providing burr-free apertures.

Grabbe discloses 32 is formed by stamping and soldering thereby forming a plurality of contact heads and ensuring difficult disengagement between joining portions.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sinclair by stamping to form a contact head, etching silicon to form a contact body, and depositing a metal over a silicon surface, as taught by Hirano and Grabbe, for the purpose of providing burr-free apertures, forming a plurality of contact heads and ensuring difficult disengagement between joining portions.



**NOTE: Please provide reference numerals to all the claimed limitations as well as support in the disclosure for better clarity. Applicants are duly reminded that a full and proper response to this Office Action that includes any amendment to the claims and specification of the application as originally filed requires that the applicant point out the support for any amendment made to the disclosure, including the claims. See 37 CFR 1.111 and MPEP 2163.06.**

***Response to Arguments***

6. Applicant's arguments filed 5/30/03 have been fully considered but they are not persuasive.

Fig. 1A shows ball leads 16, which corresponds with the ball leads 16 in Fig. 10, and Fig. 1A also shows a ball grid array package 12 as in Fig. 10. Therefore, the elements 12 and 16 are referring to the same elements as in Fig. 10; therefore, 14 is the same as in Fig. 1A as in Fig. 10. 14 is a semi-conductor device which is made of a semiconductive material.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., Applicants' disclosure . . . permanently attached" Pages 4-5 of the remarks) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Hirano discloses etching silicon to form a contact body (16 and 17) thereby providing burr-free apertures. Grabbe discloses 32 is formed by stamping and soldering thereby forming a plurality of contact heads and ensuring difficult disengagement between joining portions. It



Art Unit: 3729

would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sinclair by stamping to form a contact head, etching silicon to form a contact body, and depositing a metal over a silicon surface, as taught by Hirano and Grabbe, for the purpose of providing burr-free apertures, forming a plurality of contact heads and ensuring difficult disengagement between joining portions.

**NOTE: Please provide reference numerals to all the claimed limitations as well as support in the disclosure for better clarity. Applicants are duly reminded that a full and proper response to this Office Action that includes any amendment to the claims and specification of the application as originally filed requires that the applicant point out the support for any amendment made to the disclosure, including the claims. See 37 CFR 1.111 and MPEP 2163.06.**

*Interviews After Final*

7. Applicant note that an interview after a final rejection will not be granted unless the intended purpose and content of the interview is presented briefly, in writing (the agenda of the interview must be in writing) to clarify issues for appeal requiring only nominal further consideration. Interviews merely to restate arguments of record or to discuss new limitations will be denied. See MPEP 714.13 and 713.09.

*Conclusion*

8. Please provide reference numerals to all the claimed limitations as well as support in the disclosure for better clarity. Applicants are duly reminded that a full and proper response to this Office Action that includes any amendment to the claims and specification of the application as originally filed requires that the applicant point out the support for



Art Unit: 3729

**any amendment made to the disclosure, including the claims. See 37 CFR 1.111 and MPEP 2163.06.**

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rick K. Chang whose telephone number is (703) 308-4784. The examiner can normally be reached on 5:30 AM to 1:30 PM, Monday through Friday, except for maxi-flex day off (any one of working days).

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9302 for regular communications and (703) 872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.



Application/Control Number: 09/652,585

Page 7

Art Unit: 3729



---

**RICHARD CHANG  
PRIMARY EXAMINER**

RC

August 4, 2003